RNA,

or protein synthesis, by individual genes or by combinations such as 44/50/51, were not as rapid or complete as the shutoffs caused by ${\bf SPO1}$

infection, suggesting that we have yet to identify all components of the

machinery for any of these shutoffs.

REGISTRY NUMBERS: 9014-24-8: RNA polymerase

DESCRIPTORS:

MAJOR CONCEPTS: Infection; Molecular Genetics--Biochemistry and Molecular

Biophysics

BIOSYSTEMATIC NAMES: Endospore-forming Gram-Positives--Eubacteria, Bacteria, Microorganisms; Enterobacteriaceae--Facultatively Anaerobic

Gram-Negative Rods, Eubacteria, Bacteria, Microorganisms; Viruses--Microorganisms

ORGANISMS: B. subtilis {Bacillus subtilis} (Endospore-forming Gram-Positives) --host; E. coli (Enterobacteriaceae) --host; bacteriophage SPO1 (Viruses) --pathogen

COMMON TAXONOMIC TERMS: Bacteria; Eubacteria; Microorganisms; Viruses CHEMICALS & BIOCHEMICALS: DNA--synthesis; RNA--synthesis; RNA polymerase; antibiotics--antibacterial-drug, antiinfective-drug, lethal mechanisms; genes--cloned, expression; operon; protein--synthesis

MISCELLANEOUS TERMS: burst-size; cell division; host-takeover; knockout

mutations; transcription; Meeting Abstract; Meeting Abstract CONCEPT CODES:

00520 General biology - Symposia, transactions and proceedings

03502 Genetics - General

10062 Biochemistry studies - Nucleic acids, purines and pyrimidines

10064 Biochemistry studies - Proteins, peptides and amino acids

10802 Enzymes - General and comparative studies: coenzymes

12512 Pathology - Therapy

31000 Physiology and biochemistry of bacteria

31500 Genetics of bacteria and viruses

33504 Virology - Bacteriophage

38502 Chemotherapy - General, methods and metabolism

38504 Chemotherapy - Antibacterial agents

BIOSYSTEMATIC CODES:

07810 Endospore-forming Gram-Positives

06702 Enterobacteriaceae

03000 Viruses

INVENTOR NAME SEARCH: Charles R. Stewart

28 fles: 1977 - 2004 W 5PO1

5/3/1 (Item 1 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

15225074 PMID: 14996809

Roles of genes 44, 50, and 51 in regulating gene expression and

```
host
takeover during infection of Bacillus subtilis by bacteriophage SPO1.
  Sampath Aruna; Stewart Charles R
  Department of Biochemistry and Cell Biology, Rice University,
Houston,
Texas 77251, USA.
  Journal of bacteriology (United States)
                                            Mar 2004,
                                                       186
ISSN 0021-9193
                 Journal Code: 2985120R
  Publishing Model Print
  Document type: Journal Article
  Languages: ENGLISH
  Main Citation Owner: NLM
  Record type: MEDLINE; Completed
 5/3/2
           (Item 2 from file: 155)
DIALOG(R) File 155:MEDLINE(R)
(c) format only 2005 Dialog. All rts. reserv.
12352387
           PMID: 9657951
  Genes and regulatory sites of the "host-takeover module" in the
terminal
redundancy of Bacillus subtilis bacteriophage SPO1 .
    Stewart C R ; Gaslightwala I; Hinata K; Krolikowski K A; Needleman
D S;
Peng A S; Peterman M'A; Tobias A; Wei P
  Department of Biochemistry and Cell Biology, Rice University,
Texas 77251-1892, USA. crs@bioc.rice.edu
  Virology (UNITED STATES)
                              Jul
                                         1998,
                                                246
                                                             p329-40,
ISSN
0042-6822
            Journal Code: 0110674
  Publishing Model Print
  Document type: Journal Article
  Languages: ENGLISH
  Main Citation Owner: NLM
  Record type: MEDLINE; Completed
 5/3/3
           (Item 3 from file: 155)
DIALOG(R) File 155: MEDLINE(R)
(c) format only 2005 Dialog. All rts. reserv.
10972221
           PMID: 7751311
  Genes that protect against the host-killing activity of the E3
protein of
Bacillus subtilis bacteriophage SPO1 .
  Wei P; Stewart C R
  Department of Biochemistry and Cell Biology, Rice University,
Houston,
Texas 77005-1892, USA.
  Journal of bacteriology (UNITED STATES)
                                            May 1995,
                                                       177
                                                             (10)
p2933-7,
ISSN 0021-9193
                 Journal Code: 2985120R
  Publishing Model Print
```

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

5/3/4 · (Item 4 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

10377588 PMID: 8253678

A cytotoxic early gene of Bacillus subtilis bacteriophage $\,$ SPO1 . Wei P; Stewart C R

Department of Biochemistry and Cell Biology, Rice University, Houston,

Texas 77251-1892.

Journal of bacteriology (UNITED STATES) Dec 1993, 175 (24) p7887-900

, ISSN 0021-9193 Journal Code: 2985120R

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

5/3/5 (Item 5 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

07394322 PMID: 2414903

Transcription of Bacillis subtilis plasmid pBD64 and expression of

bacteriophage SPO1 genes cloned therein.

Curran J F; Stewart C R

Virology (UNITED STATES) Apr 15 1985, 142 (1) p98-111, TSSN

0042-6822 Journal Code: 0110674

Contract/Grant No.: .GM28488; GM; NIGMS

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

5/3/6 (Item 6 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

07394321 PMID: 2997983

Cloning and mapping of the SPO1 genome.

Curran J F; Stewart C R

Virology (UNITED STATES) Apr 15 1985, 142 (1) p78-97, ISSN

0042-6822 Journal Code: 0110674

Contract/Grant No.: GM-28488; GM; NIGMS

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH ·

Main Citation Owner: NLM -

Record type: MEDLINE; Completed

5/3/7 (Item 7 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

06885175 PMID: 6690720

Dissection of HA20, a double mutant of bacteriophage $\mbox{SPO1}$. Stewart C R

Journal of virology (UNITED STATES) Jan 1984, 49 (1) p300-1, ISSN

0022-538X Journal Code: 0113724

Contract/Grant No.: GM28488; GM; NIGMS

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

5/3/8 (Item 8 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

05300451 PMID: 96587

Terminal redundancy of "high frequency of recombination" markers of

Bacillus subtilis phage SP01 .

Cregg J M; Stewart C R

Virology (UNITED STATES) May 15 1978, 86 (2) p530-41,

0042-6822 Journal Code: 0110674

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

5/3/9 (Item 9 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

05300396 PMID: 96586

EcoRI cleavage of DNA from Bacillus subtilis phage SPO1 .

Cregg J M; Stewart C R

Virology (UNITED STATES) Apr 1978, 85 (2) p601-5, ISSN 0042-6822

Journal Code: 0110674
Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

5/3/10 (Item 10 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

05031501 PMID: 407713

Timing of initiation of DNA replication in SPO1 infection of Bacillus subtilis.

Creqq J M; Stewart C R

Virology (UNITED STATES) Jul 15 1977, 80 (2) p289-96, ssn

0042-6822 Journal Code: 0110674

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

5/3/11 (Item 11 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

04992198 PMID: 405794

Multiple origins of replication for Bacillus subtilis phage SPO1 . Glassberg J; Franck M; Stewart C R

Virology (UNITED STATES) May 15 1977, 78 (2) p433-41, ISSN

0042-6822 Journal Code: 0110674

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

5/3/12 (Item 12 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

04894476 PMID: 401897

Selective screening procedure for the isolation of heatand

cold-sensitive, DNA replication-deficient mutants of bacteriophage SP01

and preliminary characterization of the mutants isolated.

Glassberg J; Slomiany R A; Stewart C R

Journal of virology (UNITED STATES) Jan 1977, 21 (1) p54-60, ISSN

0022-538X Journal Code: 0113724

Publishing Model Print

· Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

5/3/13 (Item 13 from file: 155) DIALOG(R) File 155:MEDLINE(R) (c) format only 2005 Dialog. All rts. reserv. 04894436 PMID: 401896 Initiation and termination mutants of Bacillus subtilis bacteriophage SPO1 . Glassberg J; Franck M; Stewart C R Journal of virology (UNITED STATES) Jan 1977, 21 (1) p147-52, 0022-538X Journal Code: 0113724 Publishing Model Print Document type: Journal Article Languages: ENGLISH Main Citation Owner: NLM Record type: MEDLINE; Completed 5/3/14 (Item 1 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2005 BIOSIS. All rts. reserv. 0014014790 BIOSIS NO.: 200200608301 Roles of specific genes in host-takeover of B. subtilis by bacteriophage SPO1 AUTHOR: Sampath A (Reprint); Myles B (Reprint); Cox K (Reprint); Chen L (Reprint); Stewart C (Reprint AUTHOR ADDRESS: Rice University, Houston, TX, USA**USA JOURNAL: Abstracts of the General Meeting of the American Society for Microbiology 102 p302 2002 2002 MEDIUM: print CONFERENCE/MEETING: 102nd General Meeting of the American Society for Microbiology Salt Lake City, UT, USA May 19-23, 2002; 20020519 SPONSOR: American Society for Microbiology ISSN: 1060-2011 DOCUMENT TYPE: Meeting; Meeting Abstract RECORD TYPE: Abstract LANGUAGE: English 5/3/15 (Item 2 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2005 BIOSIS. All rts. reserv. BIOSIS NO.: 199800417363 0011623116 SPO1 gene 56 product inhibits B. subtilis cell division AUTHOR: Petti A A; Stewart C R AUTHOR ADDRESS: Rice Univ., Houston, TX, USA**USA JOURNAL: Abstracts of the General Meeting of the American Society for Microbiology 98 p362 1998 1998 MEDIUM: print

CONFERENCE/MEETING: 98th General Meeting of the American Society for

Microbiology Atlanta, Georgia, USA May 17-21, 1998; 19980517

SPONSOR: American Society for Microbiology

ISSN: 1060-2011

DOCUMENT TYPE: Meeting; Meeting Abstract; Meeting Poster

RECORD TYPE: Citation LANGUAGE: English

5/3/16 (Item 3 from file: 5)

DIALOG(R) File 5: Biosis Previews(R) (c) 2005 BIOSIS. All rts. reserv.

0011623115 BIOSIS NO.: 199800417362

The early genes of Bacillus subtilis bacteriophage SP01

AUTHOR: Stewart C R (Reprint

AUTHOR ADDRESS: Rice Univ., Houston, TX, USA**USA

JOURNAL: Abstracts of the General Meeting of the American Society for

Microbiology 98 p362 1998 1998

MEDIUM: print

CONFERENCE/MEETING: 98th General Meeting of the American Society for

Microbiology Atlanta, Georgia, USA May 17-21, 1998; 19980517

SPONSOR: American Society for Microbiology

ISSN: 1060-2011

DOCUMENT TYPE: Meeting; Meeting Abstract; Meeting Poster

RECORD TYPE: Citation LANGUAGE: English

5/3/17 (Item 4 from file: 5)

DIALOG(R) File 5: Biosis Previews(R) (c) 2005 BIOSIS. All rts. reserv.

• ,

0008610881 BIOSIS NO.: 199345041862 .

Early gene e3 of Bacillus subtilis bacteriophage SPO1

AUTHOR: Wei Ping; Stewart Charles R

AUTHOR ADDRESS: Dep. Biochem. Cell Biol., Rice Univ., Houston, TX

77251-1892, USA**USA

JOURNAL: Abstracts of the General Meeting of the American Society for

Microbiology 93 (0): p292 1993

CONFERENCE/MEETING: 93rd General Meeting of the American Society for

Microbiology Atlanta, Georgia, USA May 16-20, 1993; 19930516

ISSN: 1060-2011

DOCUMENT TYPE: Meeting RECORD TYPE: Citation LANGUAGE: English

5/3/18 (Item 5 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2005 BIOSIS. All rts. reserv.

0008583845 BIOSIS NO.: 199345014825

SPO1 and related bacteriophages

BOOK TITLE: Bacillus subtilis and other gram-positive bacteria:

Biochemistry, physiology and molecular genetics

AUTHOR: Stewart Charles R

BOOK AUTHOR/EDITOR: Hoch J A (Editor); Losick R (Editor)

AUTHOR ADDRESS: Dep. Biochem. Cell Biol., Rice Univ., Houston, TX 77251.

USA**USA

p813-829 1993

BOOK PUBLISHER: American Society for Microbiology (ASM) {a}, Books

Division, 1325 Massachusetts Ave. NW, Washington, DC

20005-4171, USA

ISBN: 1-55581-053-5
DOCUMENT TYPE: Article RECORD TYPE: Citation
LANGUAGE: English

5/3/19 (Item 6 from file: 5)

DIALOG(R) File 5:Biosis Previews(R) (c) 2005 BIOSIS. All rts. reserv.

0004694430 BIOSIS NO.: 198580003325

CLONING AND MAPPING OF THE PHAGE SPO-1 GENOME

AUTHOR: CURRAN J F (Reprint); STEWART C R

AUTHOR ADDRESS: DEP BIOLOGY, RICE UNIV, HOUSTON, TEXAS 77005, USA**USA

JOURNAL: Virology 142 (1): p78-97 1985

ISSN: 0042-6822

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: ENGLISH

5/3/20 (Item 7 from file: 5)

DIALOG(R) File 5:Biosis Previews(R) (c) 2005 BIOSIS. All rts. reserv.

0002475578 BIOSIS NO.: 197866062062

ECO-R-I CLEAVAGE OF DNA FROM BACILLUS-SUBTILIS PHAGE SPO-1

AUTHOR: CREGG J M (Reprint); STEWART C R

AUTHOR ADDRESS: DEP BIOL, RICE UNIV, HOUSTON, TEX 77001, USA**USA

JOURNAL: Virology 85 (2): p601-605 1978

ISSN: 0042-6822

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: ENGLISH

5/3/21 (Item 8 from file: 5)

DIALOG(R) File 5:Biosis Previews(R) (c) 2005 BIOSIS. All rts. reserv.

0002220435 BIOSIS NO.: 197764068792

TIMING OF INITIATION OF DNA REPLICATION IN PHAGE SPO-1 INFECTION OF BACILLUS-SUBTILIS

AUTHOR: CREGG J M; STEWART C R

JOURNAL: Virology 80 (2): p289-296 1977

ISSN: 0042-6822

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: Unspecified 5/3/22 (Item 9 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2005 BIOSIS. All rts. reserv.

0002123716 BIOSIS NO.: 197763044572

SELECTIVE SCREENING PROCEDURE FOR THE ISOLATION OF HEAT SENSITIVE AND COLD

SENSITIVE DNA REPLICATION DEFICIENT MUTANTS OF BACTERIO PHAGE SPO-1 AND

PRELIMINARY CHARACTERIZATION OF THE MUTANTS ISOLATED

AUTHOR: GLASSBERG J; SLOMIANY R A; STEWART C R
JOURNAL: Journal of Virology 21 (1): p54-60 1977

ISSN: 0022-538X

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: Unspecified

5/3/23 (Item 1 from file: 73)

DIALOG(R) File 73: EMBASE

(c) 2005 Elsevier Science B.V. All rts. reserv.

01845943 EMBASE No: 1981217100

Limited role of parental DNA in replication during infection by Bacillus

subtilis phage SPO1

Stewart C.R.; Franck M.

Dept. Biol., Rice Univ., Houston, Tex. 77001 United States Virology (VIROLOGY) (United States) 1981, 110/1 (221-224)

CODEN: VIRLA

DOCUMENT TYPE: Journal LANGUAGE: ENGLISH

5/3/24 (Item 1 from file: 144)

DIALOG(R) File 144: Pascal

(c) 2005 INIST/CNRS. All rts. reserv.

11342574 PASCAL No.: 94-0164711

A cytotoxic early gene of Bacillus subtilis bacteriophage SPO1

PING WEI; STEWART C R

Rice univ., dep. biochemistry cell biology, Houston TX 77251-1892,

Journal: Journal of bacteriology, 1993, 175 (24) 7887-7900 Language: English

5/3/25 (Item 2 from file: 144)

DIALOG(R) File 144: Pascal

(c) 2005 INIST/CNRS. All rts. reserv.

02056124 PASCAL No.: 78-0391879

TERMINAL REDUNDANCY OF "HIGH FREQUENCY OF RECOMBINATION" MARKERS OF BACILLUS SUBTILIS SPO1 .

CREGG J M; STEWART C R

DEP. BIOL., RICE UNIV., HOUSTON, TEX. 77001

Journal: VIROLOGY, 1978, 86 (2) 530-541

Language: ENGLISH

5/3/26 (Item 1 from file: 399)

DIALOG(R) File 399:CA SEARCH(R)

(c) 2005 American Chemical Society. All rts. reserv.

142291328 CA: 142(16)291328q PATENT

Protein sequences of antimicrobial proteins isolated from SPO1 bacteriophage

INVENTOR (AUTHOR): Stewart, Charles R.; Menso, A. Yousif

LOCATION: USA

ASSIGNEE: Rice University

PATENT: U.S. Pat. Appl. Publ. ; US 20050054571 A1 DATE: 20050310

APPLICATION: US 809761 (20040325) *US PV457287 (20030325)

PAGES: 36 pp. CODEN: USXXCO LANGUAGE: English CLASS: 514012000;

A61K-038/16A; C07K-014/005B

5/3/27 (Item 2 from file: 399)

DIALOG(R) File 399:CA SEARCH(R)

(c) 2005 American Chemical Society. All rts. reserv.

100048397 CA: 100(7)48397√ JOURNAL

Dissection of HA20, a double mutant of bacteriophage SP01

AUTHOR(S): Stewart, Charles R.

LOCATION: Dep. Biol., Rice Univ., Houston, TX, 77005, USA

JOURNAL: J. Virol. DATE: 1984 VOLUME: 49 NUMBER: 1 PAGES: 300-1

CODEN: JOVIAM ISSN: 0022-538X LANGUAGE: English

5/3/28 (Item 3 from file: 399)

DIALOG(R) File 399:CA SEARCH(R)

(c) 2005 American Chemical Society. All rts. reserv.

97139536 CA: 97(17)139536a JOURNAL

Recombination and expression of a cloned fragment of the DNA of Bacillus

subtilis bacteriophage SP01

AUTHOR(S): Curran, James F.; Stewart, Charles R.

LOCATION: Dep. Biol., Rice Univ., Houston, TX, 77001, USA

JOURNAL: Virology DATE: 1982 VOLUME: 120 NUMBER: 2 PAGES: 307-17

CODEN: VIRLAX ISSN: 0042-6822 LANGUAGE: English

INVENTOR NAME SEARCH, A. Yousif Shamoo

PG Pub only Pub.

7/K/1 (Item 1 from file: 399)

DIALOG(R)File 399:CA SEARCH(R)

(c) 2005 American Chemical Society. All rts. reserv.

142291328 CA: 142(16)291328q PATENT

Protein sequences of antimicrobial proteins isolated from SPO1

bacteriophage

INVENTOR(AUTHOR): Stewart, Charles R.; Manno, A. Yousif

LOCATION: USA

ASSIGNEE: Rice University
PATENT: U.S. Pat. Appl. Publ.; US 20050054571 A1 DATE: 20050310

APPLICATION: US 809761 (20040325) *US PV457287 (20030325)

PAGES: 36 pp. CODEN: USXXCO LANGUAGE: English CLASS: 514012000;

A61K-038/16A; C07K-014/005B

DIALOG INVENTOR NAME SEARCH STRATEGY

Set	Items	Description
S1	4592	AU=((STEWART, C?) OR (STEWART C.R.) OR (STEWART C.?))
S2	49	S1 AND SPO1
S 3	11048	AU=((STEWART, C?) OR (STEWART C.R.) OR (STEWART C.?) OR
(S-		
	TE	WART C?))
S4	100	S3 AND SPO1
S5	28	RD (unique items)
S6	742	AU=((SHAMOO, A?) OR (SHAMOO A?) OR (SHAMOO A.Y.) OR
(SHAMOO		
	A	Y))
s7	. 1	S6 AND SPO1
?		